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PATENT APPLICATION

ATTORNEY DOCKET NO. 10001596 -6

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Kevin Currans et al

Confirmation No.: 8513

Application No.: 10/692419

Examiner: John M Winter

Filing Date: Oct 22, 2003

Group Art Unit: 3621

Title: E-Commerce Consumables

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL OF APPEAL BRIEF**

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on Feb 12, 2008.

☒ The fee for filing this Appeal Brief is \$510.00 (37 CFR 41.20).

☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month  
\$120

☐ 2nd Month  
\$460

☐ 3rd Month  
\$1050

☐ 4th Month  
\$1640

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 510. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Respectfully submitted,

Kevin Currans et al

By 

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Patent Application of

Kevin G. Currans, et al.

Application No. 10/692,419

Filed: October 22, 2003

Group Art Unit: 3621

Examiner: JOHN M WINTER

For: E-COMMERCE CONSUMABLES

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under Rule 41.37 appealing the final decision of the Examiner dated January 3, 2008. Each of the topics required by Rule 41.37 is presented herewith and is labeled appropriately.

### **I. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

### **II. Related Appeals and Interferences**

There is an ongoing appeal related to the present application in a co-pending divisional of the same parent case. The serial no. of the co-pending case is 10/959863. A copy of the Appeal Brief, Examiner's reply, and the Appellant's reply is attached in the appendix. There are no related Interferences that Appellants are aware.

### **III. Status of Claims**

Claims 15, 20, 22, and 24 stand finally rejected. The pending claims are presented in the Appendix as required by 37 C.F.R. § 41.37. Claims 15, 20, 22, and 24 are the subject of this appeal.

### **IV. Status of Amendments**

No amendments have been filed subsequent to the Final Office Action.

### **V. Summary of Claimed Subject Matter**

The Appellants' claimed invention is to a method of exchanging payments using a consumable item to both create privileged content and as a valuable item which may be used to either collaterally secure payment or bartered away. For many consumable articles, their cost is high compared to the cost (i.e. royalty charges) of reproducing privileged content (such as songs, videos, pictures, etc). The transaction costs on an individual use basis are high compared to the cost of reproducing the privileged content. Thus, it is the appellants' insight that the amount of a consumable item in a consumable article could be used to represent currency and that the consumable item could be mortgaged (e.g. a collateral security) or bartered to pay for the cost of reproducing the privileged content, thus preventing further use

of the mortgaged or bartered portion of the consumable item. At a later time, a user can reconcile with a clearinghouse or other payment provider to recover use of the mortgaged consumable item, or if not reconciled, to have the consumable item simply bartered away. The claimed invention effectuates this insight by having claims directed to a method of exchanging payments using a consumable item which provides this dual functionality in creating privileged content.

For instance, as shown in Fig. 8 and page 9:5-13, claim 15 is directed to a method for exchanging payments. The method represents an amount of a consumable item 32 (such as ink, charge, etc.) as currency in step 100. Thus, a value is being placed on the consumable item based on its physical quantity present. The method then expends a portion of the currency in step 102. Expending the currency occurs when a royalty or other pecuniary charge is incurred for the use of privileged content (see also page 5:2-13). The method in step 104 prevents the use of a portion of the consumable item in proportion to the amount of the expended portion of currency. That is, the charge incurred in step 102 is used in step 104 to prevent the use of some portion of the consumable item 32 proportionately, thus creating a collateral security as an encumbrance on the portion of the consumable item 32. In step 106, a clearing house is contacted to make a payment representing the expended portion of the currency. That is, in this step 106 an actual payment of currency is transferred to the clearing house and when so done, the encumbrance on the use of the consumable item is released in step 110. Accordingly, the method of claim 15 is directed to using the consumable item as a collateral security. The ability to use this consumable item both for creating the privileged content as well as a article of value which can be collaterally secured is believed both novel and non-obvious.

In claim 20 as shown in Fig. 10 and described on pages 9:25-10:10 a method of exchanging payments includes purchasing a consumable item 32 in step 150 and creating a digital cash account for the consumable item in step 154. The digital cash account has an amount that is proportionally related to the amount of the consumable item. In step 152 royalty based content is acquired that indicates an owner of the content and an amount of debit charge for use of the content. In step 156, a portion of the consumable item is expended and such use incurs a debit charge when royalty based content is recreated. The digital cash account amount in step 158 is reduced by the amount of the debit charge incurred. The consumable item is prevented from being used in proportion to the reduced amount of the

digital cash account of the consumable item thus bartering a portion of the consumable item for use of the content (see page 4:17-21). In step 160, the digital cash account for the owner of the royalty based content is updated by an amount reduced from the digital cash account for the consumable item 32. Accordingly, the method of claim 20 is directed to using the consumable item as barter for cash. The ability to use this consumable item both for creating the privileged content as well as a article of value which can be bartered away is believed to be both novel and non-obvious.

Dependent claims 22 and 24 depend upon claims 15 and 20 respectively and are directed to an apparatus which includes a consumable item and which the apparatus uses the respective method to exchange payments either by collaterally securitizing the consumable item 32 (claim 15) or using the amount of the consumable item as barter (claim 20). For enablement purposes, the Appellants describe a system that includes a consumable article 30 (i.e. ink cartridge (Fig. 4), battery (Fig. 6), etc.) which further includes a consumable item 32 (i.e. ink, charge, etc) and a valve 42. The consumable article 30 that is configured to reproduce privileged content and non-privileged content by dispensing the consumable item 32 and that when dispensed to reproduce privileged content a debit charge is incurred for the cost of the use of the privileged content. The consumable article 30 also includes a meter 34 to measure the amount of the consumable item 32 within the consumable article 30. Also included is a memory device 36 to represent a currency proportional to the amount of the consumable item 32. The consumable article 30 has a control circuit 38 that is coupled to the meter 34, the valve 42, and the memory device 36. The control circuit 38 is configured to prevent dispensing of the consumable item 32 by the valve for both privileged and non-privileged content when the control circuit 38 determines that the entire amount of the consumable item 32 is collaterally secured or bartered by the debit charge. The control circuit 38 is further configured to reorganize the memory device 36 when the consumable item 32 is dispensed to reproduce the privileged content, thus keeping an accurate reflection of the amount of currency reflected by the amount of the consumable item 32. A network interface 44 is coupled to the control circuit 38 for interfacing to a website 22 or clearinghouse 26 (see Fig. 1). The control circuit 38 is configured to contact a website 22 or clearinghouse 26 (see Fig. 1) of the privileged content owner to allow reconciliation of the debit charge and to reorganize the memory 36 to recover the ability to dispense the consumable item 32 for both the privileged and non-privileged content.

## **VI. Grounds of Rejection to be Reviewed on Appeal**

In the final Office Action, claims 15, 20, 22, and 24 were rejected as unpatentable under 35 U.S.C. § 103(a) by U.S. Patent No. 6,341,273 to Briscoe. in view of U.S. Patent No. 6,282,653 to Berstis et al.

Appellant appeals this rejection as to claims 15, 20, 22, and 24. Therefore, Appellant respectfully request review of this ground of rejection as to claims 15, 20, 22, and 24 in the present appeal.

To simplify issues for appeal, Appellant will argue the rejection of the independent claims 15 and 20.

## **VII. Argument**

Appellants respectfully traverse the rejection of claims 15 and 20 as being unpatentable over Briscoe in view of Berstis.

The Supreme Court recently addressed the issue of obviousness in KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727 (2007). The Court stated that the Graham v. John Deere Co. of Kansas City, 383, U.S. 1 (1966), factors still control an obviousness inquiry. Those factors are: 1) "the scope and content of the prior art"; 2) the "differences between the prior art and the claims"; 3) "the level of ordinary skill in the pertinent art"; and 4) objective evidence of nonobviousness. KSR, 127 S.Ct. at 1734 (quoting Graham, 383 U.S. at 17-18).

With regard to the first factor regarding the scope and content of the prior art, Briscoe discloses a "coinstick" which is a virtual (a simulated or non-physical) representation of a series of digital micro-payment tokens. Berstis discloses a pair of certified devices to operate within the context of a given security protocol to manage copies of a digital file and associated copy control info.

With regard to the second factor with respect to differences between the prior art and the claims, neither Briscoe or Berstis disclose as in claim 15 "preventing the use of a portion of the consumable item in proportion to the amount of expended portion of currency, thereby creating a collateral security as an encumbrance on the portion of the consumable item" and "after payment, releasing the encumbrance an thereby allowing the use of the portion of the

consumable item." With regard to claim 20, neither cited reference disclose "creating a digital cash account for the consumable item having an amount proportionally related to the amount of the consumable item" and "preventing the use of the consumable item in proportion to the reduced amount of the digital cash account of the consumable item, thereby bartering a portion of the consumable item for the use of the content." The Examiner equates the "coinstick" of Briscoe as a "consumable item" but this "coinstick" is really just digital currency which is used to purchase "consumable items" such as "a number of pages of personalized news information" (col. 6:10-11).

With regard to the third factor regarding the level of ordinary skill in the art, the Examiner addresses what one of ordinary skill in the art would know by citing Nathan J. Muller's Desktop Encyclopedia of the Internet. However, Appellants' representative would like to note that it is the Inventor's insight of *using the value of the consumable item* (be it ink or the energy stored in a battery or any other consumable item) *as either collateral security or barter* to ensure payment of royalty charges for *privileged content reproduced by the use of the consumable item* that together makes it inventive over the various ordinary electronic payment schemes cited in the references made of record. Appellants' note that this concept of using a consumable item to both create privileged content and secure payment (or barter for payment) of its use has not been shown to be disclosed, taught, or suggested by the Desktop Encyclopedia of the Internet nor has the Examiner reasoned how one of ordinary skill in the art would conceive of the concept without the Appellants' specification and claims as a guide in such a discussion.

With regard to the fourth factor of objective evidence of non-obviousness, Appellants also note that it is improper to combine references where the references *teach away* from their combination. (*In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)). This principle was cited with approval in the recent Supreme Court decision, KSR. The Supreme Court in KSR discussed in some detail United States v. Adams, 383 U.S. 39 (1966), stating in part that in that case, "[t]he Court relied upon the corollary principle that when the prior art *teaches away* from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious." Accordingly, it remains improper to combine references where the references teach away from their combination.

Accordingly, nowhere in Briscoe can Appellants' representative find where Briscoe is "*preventing the use* of a portion of the consumable item in proportion to the amount of the expended portion of the currency." Rather, conversely, Briscoe *allows for the use* of the consumable item (reading the news pages) in proportion to the amount of the expended portion of the currency. Accordingly, Briscoe is actually *teaching away* from Appellants' claimed invention. Similarly, in Berstis, "a user establishes a 'prepaid' account from which royalty or usage payments are drawn against as files are copied/transmitted. (col. 10:11-14). Thus, Berstis is *allowing for the use* and not *preventing the use* of the consumable item (paper). Appellants had previously amended claim 15 to make it clear that this *preventing of use* of the consumable item is also "thereby creating a collateral security as an encumbrance on the portion of the consumable item" and for claim 20, "thereby bartering a portion of the consumable item for the use of the content."

The Examiner responded to the Appellants' arguments in the Final Office Action only in that he submits "that the amended features of the claimed invention are disclosed by the Berstis reference, generally cited at column 6, line 43 is a discussion of royalty prepayment for usage of content." However, the Appellants are not claiming "prepayment (for 'n' copies)" as disclosed by Berstis but rather are creating basically a securitized loan or bartering away a portion of the consumable item that is used to create the privileged content. The user has purchased a consumable item to create the privileged content and non-privileged content and thus may or may not use it as security or barter. It is only when privileged content is created and a royalty charge is incurred that the user can secure payment of the royalty charge by withholding a portion of the remaining consumable item as security for payment. If the payment is never reconciled, then this portion of the consumable item has been bartered away. This concept is not "prepayment for 'n' copies" as disclosed by Berstis and thus claims 15 and 20 have not been disclosed, taught, or suggested by the art made of record.

Accordingly, the Appellants request withdrawal of the rejection under 35 USC 103(a) for claims 15 and 20.

Dependent claims 22 and 24 depend upon claims 15 and 20 respectively and are believed patentable based at least on the patentability of their respective parent claims as discussed above.

Accordingly, claims 15, 20, 22, and 24 are deemed to be in condition for allowance,

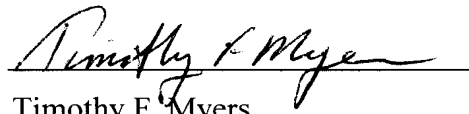


and such allowance is respectfully requested.

In view of the foregoing, it is submitted that the final rejection of the pending claims is improper and should not be sustained. Withdrawal of the rejection under 35 USC 103(a) is respectfully requested. Therefore, a reversal of the Final Rejection of January 3, 2008 is respectfully requested.

Respectfully submitted,  
for Kevin G. Currans, et al.

DATE: April 3, 2008

  
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## **VIII. CLAIMS APPENDIX**

Claims 1-14 (Cancelled).

15. (Previously Presented) A method for exchanging payments, comprising the steps of:

- representing an amount of a consumable item as currency;
- expending a portion of the currency;
- preventing the use of a portion of the consumable item in proportion to the amount of expended portion of currency, thereby creating a collateral security as an encumbrance on the portion of the consumable item;
- contacting a clearing house to make a payment representing the expended portion of currency; and
- after payment, releasing the encumbrance and thereby allowing the use of the portion of the consumable item.

Claims 16-19 (Cancelled).

20. (Previously Presented) A method of exchanging payments, comprising the steps of:

- purchasing a consumable item;
- creating a digital cash account for the consumable item having an amount proportionally related to the amount of the consumable item;
- acquiring royalty based content that indicates an owner of the content and the amount of debit charge for using the content;
- expending a portion of the consumable item wherein the use of the consumable item to recreate the royalty based content incurs a debit charge;
- reducing the amount of the digital cash account by the amount of the debit charge incurred;
- preventing the use of the consumable item in proportion to the reduced amount of the digital cash account of the consumable item, thereby bartering a portion of the consumable item for the use of the content; and

updating a digital cash account for the owner of the royalty based content by the amount reduced from the digital cash account for the consumable item.

Claim 21 (Cancelled).

22. (Original) An apparatus including a consumable item using the method of claim 15 to exchange payments.

Claim 23 (Cancelled).

24. (Original) An apparatus including a consumable item using the method of claim 20 to exchange payments.

**IX. Evidence Appendix**

None

**X. Related Proceedings Appendix**

Put Appeal brief, reply brief and Appellant reply here for 10001596-7.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Patent Application of

Kevin G. Currans, et al.

Application No. 10/959,863

Filed: October 5, 2004

Group Art Unit: 3621

Examiner: JOHN M WINTER

For: E-COMMERCE CONSUMABLES

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under Rule 41.37 appealing the final decision of the Examiner dated July 6, 2007. Each of the topics required by Rule 41.37 is presented herewith and is labeled appropriately.

### **I. Real Party in Interest**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

### **II. Related Appeals and Interferences**

There are no appeals or interferences related to the present application of which the Appellant is aware.

### **III. Status of Claims**

Claims 1-7 and 25-27 stand finally rejected. The pending claims are presented in the Appendix as required by 37 C.F.R. § 41.37.

### **IV. Status of Amendments**

No amendments have been filed subsequent to the Final Office Action.

### **V. Summary of Claimed Subject Matter**

The Applicants' claimed invention is to a consumable article and apparatuses for using the consumable article. For many consumable articles, their cost is high compared to the cost (i.e. royalty charges) of reproducing privileged content (such as songs, videos, pictures, etc). The transaction costs on an individual use basis are high compared to the cost of reproducing the privileged content. Thus, it is the inventors' insight that the amount of a consumable item in the consumable article could be used to represent currency and that the consumable item could be mortgaged (e.g. a collateral security) to pay for the cost of reproducing the privileged content, thus preventing further use of the mortgage consumable item. At a later time, the user can reconcile with a clearinghouse or other payment provider to recover use of the mortgaged consumable item, or if not reconciled, to have the consumable item simply bartered away. The claimed invention effectuates this insight by having claims directed to the

consumable article which provides this functionality as well as claims to apparatuses that use the consumable article to create privileged content.

For instance, as shown in Fig. 1 and Fig. 2 and exemplified by Fig. 4 and Fig. 6, claim 1 is directed to a consumable article 30. Consumable article 30 (i.e. ink cartridge (Fig. 4), battery (Fig. 6), etc.) includes a consumable item 32 (i.e. ink, charge, etc) and a valve 42 that is configured to reproduce privileged content and non-privileged content by dispensing the consumable item 32 and that when dispensed to reproduce privileged content a debit charge is incurred for the cost of the use of the privileged content. The consumable article 30 also includes a meter 34 to measure the amount of the consumable item 32 within the consumable article 30. Also included is a memory device 36 to represent a currency proportional to the amount of the consumable item 32. The consumable article 30 has a control circuit 38 that is coupled to the meter 34, the valve 42, and the memory device 36. The control circuit 38 is configured to prevent dispensing of the consumable item 32 by the valve for both privileged and non-privileged content when the control circuit 38 determines that the entire amount of the consumable item 32 is collaterally secured or bartered by the debit charge. The control circuit 38 is further configured to reorganize the memory device 36 when the consumable item 32 is dispensed to reproduce the privileged content, thus keeping an accurate reflection of the amount of currency reflected by the amount of the consumable item 32.

Dependent claim 25 further includes a limitation for the consumable article 30 in that it include a communication channel 44 that is coupled to the control circuit 38. The control circuit 38 is configured to contact a website 22 or a clearinghouse 26 (see Fig. 1) of the privileged content owner to allow for reconciliation of the debit charge and to reorganize the memory 36 to recover dispensing of the consumable item 32 for both the privileged content and the non-privileged content, thus releasing the mortgage or collateralized security (the consumable item 32).

Independent claim 2 is directed to an apparatus that includes the limitation the consumable article 30 of claim 1 as described above. The apparatus (i.e. computer 10, printer 12 in Fig. 1, printer 60 in Fig. 5, and media playing PDA 80 in Fig. 7) includes logic to such that when the apparatus attempts dispensing of the consumable item for the privileged content to incur a debit charge, either the control circuit 38 updates the memory device 36 or prevents dispensing of the consumable item 32. The memory device 36 is updated such that the



representation of the currency is modified by the debit charge. The prevention of dispensing occurs if the debit charge is more than the representation of the currency.

Dependent claim 26 from claim 2 includes the limitation of a communication channel 44 that is coupled to the control circuit 38. The control circuit 38 is configured to contact a website 22 or clearinghouse 26 (see Fig. 1) of the privileged content owner to allow reconciliation of the debit charge and to reorganize the memory 36 to recover the ability to dispense the consumable item 32 for both the privileged and non-privileged content.

Independent claim 7 is directed to an alternative apparatus as in claim 2 but with the addition of having a network interface 44 coupled to the control circuit 38 for interfacing to a website 22 or clearinghouse 26 (see Fig. 1).

Claim 27 depends from claim 7 and includes the limitation of having the control circuit 38 configured to allow contact with the website 22 or clearinghouse 26 to allow for reconciliation of the debit charge and to reorganize the memory 36 to recover dispensing of the consumable item 32 for both the privileged and non-privileged content.

#### **VI. Grounds of Rejection to be Reviewed on Appeal**

In the final Office Action, claims 1-7 and 25-27 were rejected as unpatentable under 35 U.S.C. § 103(a) by U.S. Patent No. 5,781,438 to Lee et al. in view of U.S. Patent No. 6,081,795 to Ryan Jr. et al.

Appellant appeals this rejection as to claims 1-7 and 25-27. Therefore, Appellant respectfully request review of this ground of rejection as to claims 1-7 and 25-27 in the present appeal.

To simplify issues for appeal, Applicant will argue the rejection of the independent claims 1, 2 and 7 and dependent claims 25-27 which were each rejected under Lee et al. in view of Ryan Jr. et al. Dependent claims 3-6 are various species of claim 2.

#### **VII. Argument**

Applicant respectfully submits that the combination of Lee and Ryan Jr. fails to disclose, teach, or suggest Applicant's claimed invention. Respectfully, Applicant asserts that the Examiner has failed to make a prima facie case in proving that all of the claimed elements are taught in the combined references. Nor has the Examiner considered Applicant's claimed invention "as a whole" nor the references themselves "as a whole" for what they teach.

As stated in In re Lintner<sup>1</sup> a prima facie case of obviousness requires the PTO to “ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification.” “To reach a proper conclusion under §103, the decision maker must step backward in time and into the shoes worn by that “person” when the invention was unknown and just before it was made. In light of all the evidence, the decision maker must then determine whether the . . . claimed invention as a whole would have been obvious at that time to that person.”<sup>2</sup> Further, “obviousness under 35 USC 103 ((1982) & Supp. III 1985) is a legal issue, the determination of which involves factual inquiries into (1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) any objective evidence of non obviousness, such as long felt need, commercial success, failures of others.”<sup>3</sup> The Applicant believes the Examiner has failed to perform such a factual inquiry and has inappropriately used Applicant's claimed invention as a template to make the various 103 combinations while ignoring other distinguishing limitations.

In addition, the Applicant believes that the Examiner has failed to consider Applicant's invention and indeed the references ‘as a whole.’ As stated by the Federal Circuit, “the claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.”<sup>4</sup>

What's more, the Examiner has not considered all that the references teach and instead has chosen to select individual components without looking at all that is taught, including those limitations that teach away from Applicant's invention. “[P]rior art references before the tribunal must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention. . . . Moreover, appellants cannot pick and choose among individual parts of assorted prior art references “as a mosaic to recreate a

<sup>1</sup> 173 USPQ 560, 562 (CCPA 1972)

<sup>2</sup> Panduit Corp. v. Dennison Manufacturing Co., 1 USPQ 2d 1593, 1595-96 (Fed. Cir.), cert. Denied, 481 U.S. 1052 (1987).

<sup>3</sup> Allen Archery Inc. v. Browning Manufacturing Co., 2 USPQ.2d 1490, 1493 (Fed. Cir. 1987).

<sup>4</sup> Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 488 (Fed. Cir. 1984)

facsimile of the claimed invention.”<sup>5</sup> Again, the Examiner has failed to look at Applicant's claimed invention as a whole but merely looked at what was different between the Applicant's claimed invention and the various cited references. “It should not be necessary . . . to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the “subject matter as a whole” which should always be considered in determining the obviousness of an invention under 35 USC 103.”<sup>6</sup> “Moreover, the conception of a new and useful improvement must be considered along with the actual means of achieving it in determining the presence or absence of invention. . . . The discovery of a problem calling for an improvement is often a very essential element in an invention correcting such a problem; and though the problem, once realized, may be solved by use of old and known elements, this does not necessarily negative invention.”<sup>7</sup> “The court must be ever alert not to read obviousness into an invention on the basis of the applicant’s own statements; that is, we must view the prior art without reading into that art appellant’s teachings. . . . The issue, then, is whether the teachings of the prior art would, in and of themselves and without the benefits of appellant’s disclosure, make the invention as a whole, obvious.”<sup>8</sup> Applicant believes that without the Applicant's disclosure, a person of ordinary skill in the art at the time the invention was made would not have been able to deduce Applicant's claimed invention without the knowledge gleaned from Applicant's disclosure. Applicant respectfully submits that there is no teaching, suggestion, or motivation in Lee and Ryan Jr. that would lead one of ordinary skill in the art to create Applicant's claimed invention.

For instance, on page 3 of the Final Office Action, the Examiner rejected claims 1-7 and 25-27 under 35 USC 103(a) as being unpatentable over Lee et (5,781,438) in view of Ryan Jr. et al (6,081,795). In particular as in the prior office action, the Examiner asserted that there were non-functional descriptive items in the claims which imposed no limitations. Applicants respectfully traversed the Examiner's statements and reasoning. For instance for claims 1, 2, and 7, the Examiner states that the term "configured to operate the valve and further configured to prevent dispensing of the consumable item by the valve for both

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<sup>5</sup> Akzo N.V. v. United States International Trade Commission, 1 USPQ.2d 1241, 1246 (Fed. Cir 1986), cert. Denied, 482 U.S. 909 (1987).

<sup>6</sup> In re Nomiya, 184 USPQ 607, 612 (CCPA 1975).

<sup>7</sup> In re Bisley, 94 USPQ 80, 86-87 (CCPA 1952).

privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered by the debit charge, and the control circuit is further configured to reorganize the memory device when the consumable item is dispensed to reproduce privileged content" could be replaced with the term "organized to profile usage", etc. and not change the limitations of the claim. The Examiner cites in re Gulack, 217 USPQ 401 (CAFC 1983) as support but Applicants' representative has reviewed this case and respectfully disagrees with the Examiner's conclusion.

In fact, the court in Gulack specifically held that "[d]ifferences between an invention and the prior art cited against it cannot be ignored merely because those differences reside in the content of the printed matter." Here the court was deciding whether the printed matter had a functional relationship to the rest of the claim. The court held that "[w]here the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability." However, the court did examine the printed matter limitation and how it actually did functionally relate to the substrate and reversed the appeal board's conclusion that the printed matter lacked "the required cooperative structural relationship." The Gulack court stated that what mattered was not "structural relationship" but rather "functional relationship." "Under section 103, the board cannot dissect a claim, excise the printed matter from it, and declare the remaining portion of the mutilated claim to be unpatentable." That is, "the claim must be read as a whole."

The Gulack court went on to state that what "is required is the existence of *differences* between the appealed claims and the prior art sufficient to establish patentability. The bare presence or absence of a specific functional relationship, without further analysis, is not dispositive of obviousness. Rather, the critical question is whether there exists any new and non-obvious functional relationship between the printed matter and the substrate." The court then went on to examine the relationship between the printed matter and the substrate and concluded that the printed matter "digits are related to the band [substrate] in two ways: (1) the band supports the digits; and (2) there an endless sequence of digits -- each digit residing in a unique position with respect to every other digit in an endless loop. Thus, the digits exploit the endless nature of the band." The court then went on to state that these features were not present in the cited reference and thus "a relationship does exist [between

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<sup>8</sup> In re Spinnoble, 160 USPQ 237, 243 (CCPA 1969).

the printed matter and the substrate] and it is different from the relationship exhibited by the corresponding elements of the [cited art] reference."

In the instant case, the Examiner has similarly ignored what he considers as "non-functional" limitations without examining whether any functional relationship exists. Nor has the Examiner compared the ignored limitations with respect to the cited art. In responding to the Applicants' arguments, the Examiner has stated that "patentability is determined by the unique structural characteristic, rather than the intended usage of the components." The Examiner contended that "the language of 'configured to reproduce,' etc. does not have patentable merit because the intended usage does not modify the structure of the claimed invention." Applicant respectfully traverses this statement. As the C.C.P.A stated in In re Swinehart<sup>9</sup>, "We are convinced that there is no support, either in the actual holding of prior cases or in the statute, for the proposition, put forward here, that 'functional' language, in and of itself, renders a claim improper." The C.C.P.A stated that "We take the characterization 'functional', as used by the Patent Office and argued by the parties, to indicate nothing more than the fact that an attempt is being made to define something (in this case, a composition) by what it *does*, rather than by what it *is* (as evidenced by specific structure or material, for example)."<sup>10</sup> The C.C.P.A held that "there is nothing intrinsically wrong with the use of such a technique in drafting patent claims. Indeed we have even recognized in the past the practical *necessity* for the use of functional language."<sup>11</sup> As noted in the MPEP §2114, "[w]hile features of an apparatus *may be recited either structurally or functionally*, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function."<sup>12</sup> (Emphasis added). The Applicants respectfully submit that claims must be read "as a whole" and that the ignored limitations are indeed functional also structural and the limitations are not disclosed, taught, or suggested by the art made of record.

In particular, the limitation "configured to operate the valve and further configured to prevent dispensing of the consumable item by the valve for both privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered by the debit charge" is functionally and structurally

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<sup>9</sup> 169 USPQ 226, 229 (1971).

<sup>10</sup> Id at 228

<sup>11</sup> Id.

<sup>12</sup> In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

tied to the "valve" and "control circuit" limitations. Note that the valve is only prevented from dispensing the consumable item when the "entire amount of the consumable item" is collaterally secured or bartered by the debit charge. This limitation cannot be substituted by "organized to profile usage" as suggested by the Examiner without fundamentally changing the limitation of the claim. How does "organized to profile usage" do anything to limit the dispensing of the consumable item and also describe under what conditions to prevent the dispensing as the Applicants' claim limitation makes clear? Accordingly, there is both functional relationship and structural cooperation between the Applicants' limitation and the rest of the claim language.

Further, the limitation "and the control circuit is further configured to reorganize the memory device when the consumable item is dispensed to reproduce privilege content" is functionally related and structurally tied to the "control circuit" and "memory device" limitations of the rest of the claim. Again, the Examiners assertion that this limitation could be replaced with "organized to profile usage" does not take into consideration when to profile the usage such as when specifically "privileged" rather than "non-privileged" content is reproduced. Accordingly, there is both structural and functional cooperation of the ignored claim limitation with the rest of the body of the claim.

The next question is whether these limitations are disclosed by the cited art. Here, the Examiner has failed to make a *prima facie* case of non-patentability by ignoring the claim limitation and not specifically stating where in the cited art these limitations are shown. Applicant's representative has reviewed the cited art and is unable to spot where any "bartering" or "collateralization" of the consumable item is taking place. Rather, the electronic currency in the cited art is only being organized based on the use of equipment but there is no preventing of the use of the equipment when the "entire amount" of the consumable item is "collaterally secured or bartered by the debit charge". The Examiner in the Final Office Action responded that the Lee reference "discloses that a fund is debited in collateral for the issuance of a digital token representing a postage indicia." However, Applicants note that this is just a purchase of the digital token as the fund noted is not linked to represent the value of a consumable item as Applicant is claiming. The fund of Lee is electronic cash whereas the "currency" of the Applicant is a linked to and a proportional representation of the amount of the consumable item. The Applicants' currency value only lies in that the user of the consumable article is unable to use the consumable item (which is

valuable) until reconciled or if not reconciled bartered away. This aspect of collateralizing or bartering away of a physical entity for electronic cash is not disclosed, taught, or suggested by the art made of record.

In particular, Lee describes a postage metering system that uses a "non-secured digital printer 18" (equated by Examiner to Applicants' valve) that is connected to a personal computer (PC) (equated by Examiner to Applicants' control circuit). The PC contains an electronic vault 20 (equated by Examiner to Applicants' memory organized as currency) which is a secure encryption device for postage funds management when printing postage (equated by Examiner to Applicants privileged content). The PC may also have a modem 29 (equated by Examiner to Applicants' network interface) for communicating with the Postal Service for recharging funds. A copy of the usage of postal funds is stored in the electronic vault. (See col. 4:38-53). Note that in col. 6, line 20 - the printer 18 is not dedicated to the metering function and thus is able to print non-privileged content. Accordingly, Lee does not disclose, teach, or suggest the limitation of "the control circuit configured to operate the valve and further configured to prevent dispensing of the consumable item by the valve for *both privileged and non-privileged content* when the control circuit determines the *entire amount* of the consumable item *is collaterally secured or bartered*."

Rather Lee only states that the printing of the privileged content can be postponed or "batched" for use at a later time at user's discretion. At most, Lee will prevent printing of the "privileged content" when funds are depleted (see col. 7:28-57) but nowhere in Lee is it disclosed, taught, or suggested that the printer be disabled for non-privileged content based on the status of the privileged contents funds availability as Applicants are claiming.

Applicants' limitation is novel and inventive over Lee in that rather than having to contact the postal service for more funds to print postage, if Lee were modified as Applicants disclose and claim, Lee could continue to print postage using the value of the ink or toner remaining in the printer as collateral for future payment. However, Lee does not disclose, teach, or suggest such a modification. Accordingly, Applicants believe claim 1, as previously amended, and claim 2 which has been similarly previously amended to be patentable over Lee and other art made of record. Claims 3-6 depend upon claim 2 and are believed patentable based at least on the patentability of claim 2. Accordingly, Ryan alone or in combination with Lee does not disclose, teach, or suggest Applicants' claimed invention. Claims 1, 2 and 7 are thus believed patentable over Lee in view of Ryan. Dependent claims 3-6 depend upon

either claim 2 and thus are believed patentable based at least on the patentability of the parent claims.

Further, claims 25-27 are believed patentable over each of the cited references. Nor can the combination of Ryan with Lee create Applicants' claimed invention in claims 25-27 as Ryan merely describes a network of postal meters. Dependent claims 25-27 all include the limitation of where the control circuit is "configured to contact the website or the clearinghouse of the privileged content owner to all reconciliation of the debit charge and to reorganize the memory to recover dispensing of the consumable item for both the privileged content and the non-privileged content." Ryan in col. 3, lines 1-5 states that "when a large mail run requires more postal value than is stored on a single PSD (postal security device), the Client module can access another PSD on the network to complete the mail run without having to interrupt the mail run to refill the PSD that is low on funds." As noted in col. 1, lines 61-63, "if any meter on the network fails, postage may be obtained from another meter on the network." Thus, Ryan does not "prevent dispensing of the consumable item by the valve for both privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered by the debit charge" but rather continues to dispense by using the postage on another machine on the network to pay for the mail run. Thus, the control circuit does not "reorganize the memory device when the consumable item is dispensed to reproduce the privileged content" but rather reorganized the memory device on the other networked PSD to use its currency.

Accordingly, Ryan neither alone nor in combination with Lee discloses, teaches, nor suggests Applicants invention as claimed in claims 25-27. As noted, it is the inventors' insight that using a consumable item that has high value to the user as collateral for payment for the use of privileged content and then having the ability to later reconcile the payment allows for a unique and effective way of dealing with royalty micro-payments that normally would incur high transaction costs.

As stated in *KSR Int'l. v. Teleflex*,<sup>13</sup> when considering obviousness of a combination of known elements, the operative question is "whether the improvement is more than the predictable use of prior art elements according to their established functions." Accordingly, the ability to use a high valued consumable item to represent currency by preventing the use

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<sup>13</sup> 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007)

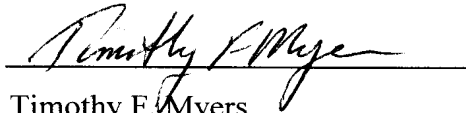


of the represented amount, the Applicants have created a new approach to micro-payments for royalties and have accordingly claimed and defined the consumable article and apparatus that use the consumable articles to effectuate this new micro-payment scheme. As such, Applicants' claimed invention is both novel and inventive over the art made of record.

In view of the foregoing, it is submitted that the final rejection of the pending claims is improper and should not be sustained. Withdrawal of the rejection under 35 USC 103(a) is respectfully requested. Therefore, a reversal of the Final Rejection of July 6, 2007 is respectfully requested.

Respectfully submitted,  
for Kevin G. Currans, et al.

DATE: November 5, 2007

  
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## **VIII. CLAIMS APPENDIX**

1. (Previously Presented) A consumable article, comprising:
  - a consumable item;
  - a valve configured to reproduce privileged content and non-privileged content by dispensing the consumable item and that when dispensed to reproduce privileged content incurs a debit charge;
  - a meter for measuring an amount of the consumable item;
  - a memory device organized to represent currency proportional to the amount of the consumable item; and
  - a control circuit coupled to the meter, the valve, and the memory device, the control circuit configured operate the valve and further configured to prevent dispensing of the consumable item by the valve for both privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered by the debit charge, and the control circuit is further configured to reorganize the memory device when the consumable item is dispensed to reproduce privileged content.
2. (Previously Presented) An apparatus, comprising:
  - a consumable article, including:
    - a consumable item;
    - a valve configured to reproduce privileged content and non-privileged content by dispensing the consumable item and that when dispensed to reproduce privileged content incurs a debit charge;
    - a meter for detecting an amount of the consumable item;
    - a memory device organized to represent currency proportional to the amount of the consumable item; and
    - a control circuit coupled to the meter, the valve, and the memory device, the control circuit configured operate the valve and further configured to prevent dispensing of the consumable item by the valve for both privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered by the debit charge, and the control circuit is further configured to reorganize the memory device when the dispensing of the consumable item to reproduce privileged content

by the valve as detected by the meter; and

wherein when the apparatus attempts dispensing of the consumable item for the privileged content to incur the debit charge, either the control circuit updates the memory device wherein the representation of currency is modified by the debit charge or the control circuit prevents dispensing of the consumable item by the valve if the debit charge is more than the representation of currency.

3. (Original) The apparatus of claim 2 wherein the apparatus is a printing device.

4. (Original) The apparatus of claim 2 wherein the apparatus is a plotting device.

5. (Original) The apparatus of claim 2 wherein the apparatus is a computer.

6. (Previously Presented) The apparatus of claim 2 wherein the apparatus is a media player.

7. (Previously Presented) An apparatus, comprising:

a consumable article, including:

a consumable item;

a valve configured to reproduce privileged content and non-privileged content by dispensing the consumable item and that when dispensed to reproduce privileged content incurs a debit charge;

a meter for detecting the amount of the consumable item;

a memory device organized to represent currency proportional to the amount of the consumable item; and

a control circuit coupled to the meter, the valve, and the memory device, the control circuit configured to prevent dispensing of the consumable item by the valve for both privileged content and non-privileged content when the control circuit determines the entire amount of the consumable item is collaterally secured or bartered, and the control circuit is further configured to reorganize the memory device when the dispensing of the consumable item by the valve is dispensed to produce privileged content; and

a network interface for interfacing to a website or clearinghouse, the network interface

coupled to said control circuit;

wherein when the apparatus dispenses the consumable item for the privileged content, the control circuit is either configured to update the memory device wherein the representation of currency is modified by the debit charge or configured to prevent dispensing of the consumable item by the valve if the debit charge is more than the representation of currency.

Claims 8-24 (Cancelled).

25. (Previously Presented) The consumable article of claim 1, further comprising a communication channel coupled to the control circuit wherein the control circuit is configured to contact a website or a clearinghouse of the privileged content owner to allow reconciliation of the debit charge and to reorganize the memory to recover dispensing of the consumable item for both the privileged content and non-privileged content.

26. (Previously Presented) The apparatus of claim 2, further comprising a communication channel coupled to the control circuit wherein the control circuit is configured to contact a website or a clearinghouse of the privileged content owner to allow reconciliation of the debit charge and to reorganize the memory to recover dispensing of the consumable item for both the privileged content and non-privileged content.

27 (Previously Presented) The apparatus of claim 7, wherein the control circuit is configured to contact the website or the clearinghouse of the privileged content owner to allow reconciliation of the debit charge and to reorganize the memory to recover dispensing of the consumable item for both the privileged content and non-privileged content.

**IX. Evidence Appendix**

None

**X. Related Proceedings Appendix**

None

**XI. Certificate of Service**

None